

IN THE SPECIFICATION:

Please insert the attached amendments to the original specification.

At page 2, line 5, change the paragraph to read as follows:

USSN 09/813,667, [(Docket 041-509-L)]
entitled "THIN CLIENT SIZING TOOL FOR ENTERPRISE SERVER
FARM SOLUTION CONFIGURATOR";

At page 2, line 8, change the paragraph to read as follows:

**USSN 09/813,671, [[(Docket 041-510-L)]]
entitled "CONFIGURATION INTERVIEW SESSION METHOD FOR THIN
CLIENT SIZING TOOL";**

At page 2, line 11, change the paragraph to read as follows:

USSN 09/813,670, [[(Docket 041-512-L)]]
entitled "SOLUTION GENERATION METHOD FOR THIN CLIENT
SIZING TOOL";

At page 2, line 13, change the paragraph to read as follows:

USSN 09/813,668, [[Docket 041-513-L]]
entitled "METHOD FOR CALCULATING USER WEIGHTS FOR THIN
CLIENT SIZING TOOL";

At page 2, line 16, change the paragraph to read as follows:

USSN 09/813,669, [[(Docket 041-514-L)]] entitled "METHOD FOR CALCULATING MEMORY REQUIREMENTS FOR THIN CLIENT SIZING TOOL";

At page 2, line 19, change the paragraph to read as follows:

[[USSN 09/443,926 (Docket 041-475-L)]] U.S.
Patent 6,496,948 entitled "METHOD FOR ESTIMATING THE
AVAILABILITY OF AN OPERATING SERVER FARM";

At page 2, line 22, change the paragraph to read as follows:

[[[USPN 09/474,706 (Docket 041-476-LR)]] U.S.
Patent 6,571,283 entitled "METHOD FOR SERVER FARM
CONFIGURATION OPTIMIZATION";

At page 2, line 24, change the paragraph to read as follows:

**USSN 09/705,441, [[(Docket 041-479-L)]]
entitled "METHOD FOR SERVER METAFARM CONFIGURATION
OPTIMIZATION".**

At page 7, line 2, change the paragraph to read as follows:

BRIEF DESCRIPTION OF THE DRAWINGS:

Figs. 1A and 1B and 1C show a flow chart illustrating methods for configuring and optimizing the size of a Metafarm which is tailored to best specify utilization for the customer's needs;

At page 11, line 22, change the paragraph to read as follows:

13. BASE SOLUTIONS TAB WINDOW (FIG. 23 OF [[DOCKET 041-509-L]]) USSN 09/813,667: Reports the minimum server configuration recommendation (i.e., not including additional redundancy or growth considerations) for each of the customer Site's server farms. A base solution includes the minimum number of servers and GB RAM required with regard to the Operating system, # processors and MHz available for each server type supported by Unisys.

At page 14, lines 3-4 , change the paragraph to read as follows:

24. DISK CAPACITY TAB WINDOW (FIG. 27 OF [[DOCKET 041-509-L)]] USSN 09/813,667: Reports on the disk capacity requirements determined by the interview session input and solution generation algorithms for each of the customer Site's Server Farms.

At page 16, lines 7-8 , change the paragraph to read as follows:

36. NETWORK CAPACITY TAB WINDOW (FIG. 26 OF [[DOCKET 041-509-L]]) USSN 09/813,667: This is called Network Utilization now; reports on the estimated network activity measured in Kbps for each of the customer Site's Server Farms.

At page 17, lines 1-2, change the paragraph to read as follows:

39. OPTIONAL SOFTWARE TAB WINDOW (FIG. 25 OF [[DOCKET 041-509-L]]) USSN 09/813,667: Reports on the additional features/capabilities entered in the interview session regarding the customer's profile for each of the Site's Server Farms. Optional software requirements include such categories as Client Connection Methods, Enhancements, Environment support, Multimedia capabilities, Display characteristics, Protocol support, and Server Enhancements.

At bottom of page 22 and continuing to top of page 23, lines 1-7, change the paragraph to read as follows:

Fig. 3 is an example of a particular type of configuration known as a Server Metafarm 8. The Metafarm 8 may include a number of Server Farms designated as 10A, 10B, 10C . . . 10K. Each of the Server Farms will be seen to have a disk database server 12A, 12B . . . 12K, and a series of application programs with hardware servers. For example, Server Farm 10A will have a disk database server 12A, which is attached to a series of application programs 10P, 20P, and [[PAN]] AN. Each of these programs is associated respectively with a particular hardware server A1, A2 and [[N]] AN.

At page 23, line 31, change the paragraph to read as follows:

In order to help a designer or supplier support a customer to develop an optimum configuration for their large user group (or Metafarm), which can be configured to optimize the services to be provided to the customer or user, a very specific set of information referred to as the "Customer Profile" is first developed and placed in a Configuration Session Database 50. This Customer Profile development was described in co-pending USSN 09/813,671, [(Docket 041-510-L)] entitled "CONFIGURATION INTERVIEW SESSION METHOD FOR THIN CLIENT SIZING TOOL" and is incorporated by reference herein.

At page 24, lines 16-21, change the paragraph to read as follows:

In conjunction with the interview process, the option is available to a customer to obtain assistance in subdividing their large site into reasonably-sized Server Farms. The present method can be used during or prior to the interview process to systematically determine the most efficient subdivision recommendation for the customer. Once this subdivision is determined, the configuration interview session is then resumed for further development of the user and application type attributes of the customer's users that are pertinent to configuration sizing. Once this information has been developed, it is placed in the Configuration Session Database (as seen in the co-pending application, USSN 09/813,671, [[Docket 041-510-L]]). The present method will be seen in Figs. 1A and 1B and 1C and described herein together with some specific numbers and parameters which will further illustrate how the particular algorithm is developed. Here, the series of steps in the flowchart of Figs. 1A, 1B, 1C, will be designated by various markers, such as C1, C2, C3, etc., through C20.

At page 24, lines 25-26, change the paragraph to read as follows:

Metafarm sizing for configuration optimization in Fig. 1A, is entered from the Configuration Interview Session described in co-pending USSN 09/813,671.[[,]] [[(Docket 041-510-L).]] Initial default values for the required Input step (C1) are programmatically entered initially by the configurator as seen in Table I, which will illustrate a typical example.

At page 26, line 11, change the paragraph to read as follows:

The User weight factor is also gleaned from the Server Info Database 20, Fig. [[3]] 2, on a server basis to determine how a user compares to a benchmark user. A Heavy user is customarily considered the same weighting factor as a benchmark user therefore making its factor = 1. A "Light" user, however, would be considered to use 50% of the system resources as a benchmark user. The following Table II is a mapping for customary user weight factors with respect to a typical benchmark user.

At page 27, add a new line 6, to read as follows:

Redundant Servers per Farm

[EQ2] = <Servers per Farm>*RF

= 358 * 0.25

= 89 Redundant Servers per Farm

[where * = a multiplication sign]

Then C6 continues via connecting marker CW over to step C7 on Fig. 1B.

At page 28, line 23, change the paragraph to read as follows:

- 3. Server Benchmark testing results for the preferred Server's Mean Time To Failure (MTTF) = 1200 hours (which is stored in the Server Info Database of Fig. [[3]] 2, element 20).**

At page 29, line 21, change the paragraph to read as follows:

The #Farms (number of Farms) is incremented from 3 to 4 at step (C10) and since the number of Farms is still not greater than 100, "NO" is answered at step (C11), then the next updated recommendation is calculated at step (C5) thus dividing the Users into farms via steps (C5) to (C8). If the Estimated Availability Level at step (C9) meets or exceeds the Availability Goal (YES), the Estimated Availability Level is stored in the Choices array at the index #Recommendations step (C9Y). The #Recommendations (C9Y2) and incremental #Farms (C10) are both incremented by 1. This loop sequence continues until #Farms is incremented to be more than 100 at which time "YES" is the answer at step (C11) to "Is #Farms>100?" (C11).

At page 29, line 25, add a new sentence to read as follows:

The #Farms (number of Farms) is incremented from 3 to 4 at step (C10) and since the number of Farms is still not greater than 100, "NO" is answered at step (C11), then the next updated recommendation is calculated at step (C5) thus dividing the Users into farms via steps (C5) to (C8). If the Estimated Availability Level at step (C9) meets or exceeds the Availability Goal (YES), the Estimated Availability Level is stored in the Choices array at the index #Recommendations step (C9Y). The #Recommendations (C9Y2) and #Farms (C10) are both incremented by 1. This loop sequence continues until #Farms is incremented to be more than 100 at which time "YES" is the answer at step (C11) to "Is #Farms>100?" (C11). The "YES" leg of C11 continues via marker CY over to Fig. 1C. The "NO" leg of C11 continues via marker C2 over to Fig. 1A.

At page 31, line 18, change the paragraph to read as follows:

After the calculations are redone using the new Redundancy Factor, the recommendation choices have been narrowed down to a more optimal configuration recommendation. At this point, the Choices array (C14Y) will have the following recommendation entries shown in Table IV:

At page 32, line 10, change the paragraph to read as follows:

The next decision block at step (C12) is required to determine "Is #Recommendations>0?" (C12) indicating whether or not some recommendations exist that will meet the customer's criteria. If the answer is "Yes", the redundancy factor increment variable Rfinc, which is currently -5%, is checked and asked "Is Rfinc 1%" (C12Y) to which the answer is "NO" and the Rfinc variable is reset to -5% at (C12YN). And the redundancy factor, RF is incremented by Rfinc (C13) resulting in the redundancy factor being decremented from 20% to 15%.

At page 34, line 13, change the paragraph to read as follows:

Now at step (C12, Fig. ~~[[1B]]~~ 1C), the decision block question "Is the #Recommendations greater than 0?" is answered "YES", as well as the question "Is your RF increment 1%?" step (C12Y) to which a "YES" indicates that the optimum redundancy factor has been found. The information in the Choices array step (C14Y) is then displayed in the Metafarm Sizer Server Farm Subdivision Recommendations grid on the User's PC screen at step (C15). The column of the recommendation that has the least number of total servers is highlighted at step (C16) to indicate the sizer's best recommendation (C16).

At page 35, lines 27-30, and continuing through page 36, lines 1-2, change the paragraph to read as follows:

2. Selecting a recommendation column via step C18 in the Sizer's Server Farm Subdivision Recommendation Grid and returning the #Farms and Users per Farm [[C18]] (C18A) for use in the Interview Session as shown in co-pending USSN 09/813,671, [[Docket 041-510-L]] for information for the methods used on the Configurator Interview Session). The algorithm is then exited (C20).

*At bottom of page 35 through top of page 36,
lines 1-2, change the paragraph to read as follows:*

2. Selecting a recommendation column in the Sizer's Server Farm Subdivision Recommendation Grid and returning the #Farms and Users per Farm (C18) for use in the Interview Session as shown in co-pending USSN 09/813,671, [[[Docket 041-510-L)]] for information for the methods used on the Configurator Interview Session). The algorithm is then exited (C20).

IN THE CLAIMS:

Please amend claims 1-7, as indicated.

1. (Currently Amended) In a Thin Client Sizing Tool, a method for developing a Metafarm having an optimal number of Server Farms to provide recommended configurations meeting certain specified parameters, wherein a number of factors are established which include: (i) the total number of users who will be using the Metafarm; (ii) an Availability goal which indicates the percentage of time that the systems and applications in each Server Farm will be accessible to all the users involved; (iii) assigning a user weight volume to each type of user to indicate estimated average usage or light, medium, heavy or super heavy; (iv) calculating the number of servers to be assigned to each Server Farm and which will fulfill the said Availability goal; (v) calculating the number of redundant servers per Server Farm needed to provide maximum performance over and above the average nominal performance while still fulfilling said Availability goal; (vi) seeking to find the minimum number of Server Farms which still provide an optimum Redundancy Factor of extra servers which will still fulfill the desired Availability goal, comprising the steps of:

(a) delivering input data on the total number of users to be serviced, the Availability goal to be achieved, the User-Weight utilization factors involved, and the preferred Server types to be used;

(b) sequencing a series of calculations to determine the number of Servers per Farm and the number of redundant Servers per Farm which match or exceed the said Availability goal;

(c) displaying a set of recommendations which show the minimum number of Server Farms which have the optimum redundancy factor and meet the values needed for the Availability goal.

2. (Currently Amended) The method of claim 1 ~~[[2]]~~
wherein data on Benchmark operational parameters are
consulted on a specific type of server to establish the
maximum number of users which can be supported by said
chosen specific type of server, and wherein step (b)
includes the steps of:

(b1) retrieving a Benchmark parameter
which indicates the maximum number of
users which can be serviced by a chosen
Server type;

(b2) calculating a preliminary number of
such chosen Servers which will constitute
a Server Farm;

3. (Currently Amended) The method of claim 2 wherein a desired Redundancy Factor is used to add enough extra servers, designated as a number of redundant servers per farm, to enable maximal user usage over nominal user usage and wherein an estimated Availability Level is set for each chosen Server Farm, and wherein step (b2) includes the steps of:

(b3) calculating the number of redundant Servers per Farm according to a preliminary set percentage parameter for the Redundancy Factor;

(b4) calculating the estimated Availability Level for the Server Farm chosen.

4. (Currently Amended) The method of claim 3 wherein a desired Availability Level goal of a certain maximum downtime value is _checked_ to see if it meets said Availability Level goal according to the number of Server Farms first estimated and the number of servers-per-farm first estimated, and the number of redundant servers-per-farm first estimated, and which includes the steps of:

(b5) if step (b4) Availability Level does not meet or exceed the Availability Level goal, then initiate a sequential loop by either incrementing or decrementing the number of Server Farms to re-calculate the number of Servers per Farm and number of redundant Servers per Farm which meet or exceed the Availability Level goal

5. (Currently Amended) The method of claim 3 wherein there is accommodated a Redundancy Factor indicating the possible number of extra users which can be accommodated in a Server Farm which is added to the nominal number of users-per-server without exceeding the maximum allowable users-per-server set by benchmarking data,

and wherein correlation is made between the number of users-per-Server Farm, the number of servers and the estimated Availability Level for each Server Farm and wherein there is established the total number of servers in the entire Metafarm, and which includes the steps of:

(b5) decrementing the Redundancy Factor until no acceptable recommendations are available;

(b6) incrementing the Redundancy Factor in steps of 1% to find the optimum Redundancy Factor;

(b7) storing configuration recommendations in an array indicating output displays of the number of Servers correlated to the number of Users per Farm with the estimated Availability Level, estimated yearly downtime, number of redundant Servers in the Metafarm and the total number of Servers in the Metafarm.

6. (Currently Amended) In a Thin Client Sizing tool, a method for optimizing the number of Server Farms to provide the most efficient recommended configurations which provide a desired Availability Level goal and Redundancy Factor, wherein data is accumulated as to the number of Users to be involved, the Availability goal of maximum downtime permitted, and the usage weight load by each type of user; the number of servers to be utilized in each Farm, plus the number of redundant servers to be placed in each Server Farm to allow performance service beyond the nominal usage; utilizing an experienced benchmark value for types of servers involved to ensure that the number of servers-per-farm does not exceed the appropriate benchmark value for the type of server involved; providing a calculated Availability Level for the maximum allowable downtime which meets the downtime goal for Availability Level; reporting out a number of output recommendations which correlates sets of parameters which link the number of farms with the number of users-per-farm with the Estimated Availability, with the Estimated Downtime, with the number of Redundant Servers, and with the Total Number of Servers in order to select that set of parametric criteria which best fulfill a selected customer's requirements, comprising the steps of:

- (a) inputting of data to indicate the number of users involved, the Availability goals, the user-weight factors, and preferred server types;
- (b) calculating the number of Servers per Farm to be utilized;

(c) calculating the number of redundant Servers to be placed in each Server Farm;

(d) using a benchmark to check if the number of Servers per Farm from steps (b) and (c) exceed the benchmark values for the Servers involved;

(e) if step (d) indicates that the number of Servers per Farm does not exceed the benchmark value, then calculating the estimated Availability Level of the Server Farm;

(f) checking to see that the said calculated Availability Level meets or exceeds the Availability Level goal;

(g) if the Availability Level goal is not met or exceeded, then incrementing the number of Server Farms by "1";

(h) checking to see if the number of Server Farms is greater than 100 or not greater than 100;

(i) if the number of Server Farms is less than 100, then requesting through steps (b), (c), (d), (e), (f), (g), and (h) until step (h) indicates that the number of Server Farms is greater than 100;

(j) checking to see that the number of output recommendations is greater than "0";

(k) decrementing the Redundancy Factor in steps of 5% until no acceptable recommendations are available;

(l) incrementing the Redundancy Factor in steps of 1% to develop a set of recommendations which minimize the number of Server Farms while still supporting the number of users required and still meeting the Availability Level goal.

7. (Currently Amended) A Thin Client Sizing Tool system for configuring a Metafarm consisting of multiple Server Farms which provides the optimum size and Availability Level goals for a specified customer profile wherein data is stored which specifies the number of servers basically required to service any given number of users; and algorithmic program means for establishing the optimum number of servers-per-farm and optimum number of redundant servers-per-farm which will provide the most cost-efficient service for the customer's special requirement; selective choices of Redundancy Factor values which will satisfy a customer's prescribed Availability Level goal as to the maximum allowable downtime, comprising:

- (a) customer profile data means stored in a customer database;
- (b) benchmark information means stored in a benchmark database indicating the number of Servers required to service a given number of users;
- (c) program means for calculating the optimum number of Servers per Farm and the optimum number of redundant Servers per Farm;
- (d) loop sequencing means for configuring different numbers of Servers per Farm with different values of the Redundancy Factor to display parameters which meet or exceed a prescribed Availability Level goal.

REMARKS

In response to the Examiner's Office Action of July 29, 2004, Applicants have taken under review the Examiner's statements and considerations on this case.

In regard to the drawings, the Examiner has suggested that the reference characters C7 through C20 have not been included in the description of Figs. 1A, 1B and 1C. On reviewing pages 25-36 of the text of the specification, it will be noted that in actual fact, each of the various factors have been covered, except for step C18A, which now has been added by amendment to the specification.

Further, in regard to Examiner's comment about the marker notations CZ and CW, which appear in the drawings of Fig. 1A, 1B and 1C, these marker designations have now been put into the amended text of the specification.

The Examiner has rejected claims 1-7 for indefiniteness and lack of antecedent basis under 35 USC 112, second paragraph, with Examiner indicating the various phrases which he considers lacks the antecedent basis. Accordingly, Applicants have now amended these claims in order to provide antecedents for all the referenced phrases which Examiner indicated as lacking in antecedent basis. Thus, there should no longer be any objection under 35 USC Article 112 in regard to these claims.

The Examiner has rejected claims 1-7 under 35 USC 102(e) as being "anticipated" by the Blumenau reference, U.S. Patent 6,665,714. At this juncture, Applicants would hereby traverse the Examiner's conclusions as to anticipation on these claims. Applicants will hereinbelow address various aspects and clauses of Applicants' claims with regard to the citations that Examiner has made in the Blumenau reference.

REGARDING APPLICANTS' CLAIM 1: In Applicants' claim 1(a) regarding --- delivering input data to the total number of users to be serviced, the availability goal to be achieved, the User-

Weight utilization factors and the preferred server types to be used --- the Examiner has cited the Blumenau reference column 4, lines 40-47.

Here, Blumenau references his Fig. 16 to illustrate a method of graphically representing how data is stored in a storage system that can be provided by a Graphical User Interface -- wherein Fig. 16 identifies various numbers of "volumes" and indicates the owners thereof.

Thus, it can be seen that certainly Blumenau does not teach any information about a Server Farm and the total number of users to be serviced, the availability goals to be achieved, the User-Weight utilization factors involved and the preferred server types. Therefore, it is not permissible to say that Blumenau can teach claim 1(a) of Applicants'.

REGARDING APPLICANTS' CLAIM 1(b): This involves sequencing a series of calculations to determine the number of Servers per Farm and the number of Redundant Servers per Farm which match or exceed the availability goal:---

Here, the Examiner cites Blumenau column 6, line 35-67: This involves a data management aspect of Blumenau which configures volumes of data at the storage system 20 according to the identity of the host devices coupled to the storage system. The configuration data is used to manage the allocation of volumes to different hosts which may be provided by a system administrator of the network. The system administrator tracks the host devices that are coupled to the network and the available volumes at the storage system. As a new host device enters the network, the system administrator allocates storage volumes to the host.

Now, it can be seen that there is no teaching in Blumenau of sequencing a series of calculations to determine the appropriate number of Servers per Farm and the number of Redundant Servers per Farm.

Examiner then cites Blumenau column 21, lines 45-60, regarding Applicants' claim 1(b): -- Here, Blumenau discusses a utility being provided to give additional identification information pertaining to the host and host pairs that are logged into a storage system. An alias can be used to view and manage the host pair and configure storage volume assignments therefore. The utility may be implemented in software that executes on the CPU of a host processor to include this additional information in the history table 1269 of the configuration database.

Again, it will be seen that Blumenau does not indicate a series of calculations to determine the number of Servers per Farm, and the number of Redundant Servers per Farm.

Examiner cites column 26, lines 1-20 regarding Applicants' claim 1(b): -- Here Blumenau discusses a shared assigned storage volume icon 1540 which represents a storage volume in a storage system that has been assigned to more than one host processor/HBA pair in the configuration database 1232 of the storage system.

Here, a discussion of a configuration database related to assignments of storage volumes has nothing to do with the teaching of determining the number of Servers per Farm and the number of redundant Servers per Farm.

IN REGARD TO APPLICANTS' CLAIM 1(C): Examiner has cited Blumenau column 17, lines 45-67: -- Here, Blumenau discusses a user interface for a system administrator. The user interface communicates with a configuration database of a storage system to enable a user or another application program to view and manage the availability and assignment of data storage volumes to different hosts in a storage network. . . . A Graphical User Interface is provided with which a user can graphically view the availability and assignment of data storage volumes to different hosts in a storage network.

It is to be noted that the Blumenau reference does not teach Applicants' clause (c) for displaying a set of recommendations which show the minimum number of Server Farms which have the optimum redundancy factor and meet the values for the availability goal.

Then, Examiner cites column 18, lines 1-25, regarding Applicants' claim 1(c): -- this aspect of Blumenau involves a command line interface provided that can be used to query the availability and assignment of data storage volumes to different hosts in the network. The command line interface allows a user or another application program to generate reports illustrating the topology of a storage network.

Here again, there is no teaching of displaying recommendations for the minimum number of Server Farms which have the optimum redundancy factor.

In Applicants' claim 1(c), Examiner has cited Blumenau column 25, lines 10-67: --- Here, Blumenau discusses a GUI Management Window 1400 which displays devices, such as host processors, storage systems, host bus adapters, and storage system adapters, in a storage area network with each device being represented by an easily recognizable icon . . . an administrator host permits the allocation of volumes and the modification of

how devices are connected in the storage network to be managed from a central control station or host processor.

There is nothing here in these generalized statements of Blumenau which would enable a set of recommendations to show the minimum number of Server Farms which have the optimum redundancy factor.

Examiner has cited Blumenau column 30, lines 15-20 in regard to Applicants' claim 1(c): -- Here, Blumenau indicates a report option may be used to generate information detailing the configuration of a storage network or the configuration of a particular device or volume, and this information can be either displayed or written to a file.

Note that Blumenau is involved with the problem of assigning a particular volume to a particular device, and only talks in generalized terms here, so that there is no possible teaching regarding recommending the minimum number of Server Farms which have the optimum redundancy factor and which meet the availability goals.

Now, likewise, claims 2-5 which are dependent on claim 1 will be seen to be completely differentiative in Applicants' system from any of the teachings indicated by the Examiner in the Blumenau reference.

IN REGARD TO APPLICANTS' CLAIM 6 AND CLAUSES (a), (b), (c), (d), (e), (f) . . . THROUGH CLAUSES (j), (k), (l): Here, it should be indicated that none of the columns and lines of Blumenau which have been cited by the Examiner can possibly be imputed to handle the various factors as the number of users involved, the preferred server types, the number of Servers per Farm, the number of Redundant Servers, the use of benchmark data meeting the availability level goal, and the method of decrementing or incrementing the redundancy factor to develop a set of recommendations which minimizes the number of Server Farms, while still meeting the requirements of the number of users and the availability level goals.

IN REGARD TO APPLICANTS' CLAIM 7, CLAUSES (a), (b), (c), (d): The Examiner has cited several columns of the Blumenau reference, and herein Applicants will discuss several aspects of the clauses involved herein.

In Applicants' claim 7(b), the Examiner has cited Blumenau column 2, lines 1-15: Here, it is seen that Blumenau indicates a storage system including at least one storage device, apportioned into a plurality of volumes, a configuration table to store configuration data identifying which of a plurality of devices coupled to the storage system are authorized to access each of the plurality of volumes, and a filter . . . to selectively forward to the at least one storage device requests for access to the plurality of volumes. . . .

Now, looking at Applicants' claim 7(b), which involves benchmark information means stored in a benchmark database indicating the number of servers required to service a given number of users:--- Here, it can be seen that Blumenau statements in column 2, lines 1-15

certainly do not involve servers, they do not involve benchmark information or a benchmark database, or means to indicate the number of servers required to service a given number of users. Therefore, it can be seen that this Blumenau reference cannot teach Applicants' claim 7, clause (b).

Then also, the Examiner has cited Blumenau column 30, lines 15-20, in respect to Applicants' claim 7, clause (b), where --- Blumenau indicates a report option may be used to generate information detailing the configuration of the storage network or the configuration of a particular device or volume, and this information can be either displayed or written to a file.

Again, this rudimentary statement and information by Blumenau has no relationship to the use of benchmark information from a benchmark database to help find the number of servers required to service a given number of users.

In regard to Applicants' claim 7(c), Examiner has cited Blumenau column 6, lines 35-67: --- Basically here, Blumenau discusses a data management aspect which configures volumes of data at the storage system 20 according to the identity of the host devices coupled to the storage system. The configuration data is used to manage the allocation of volumes to different hosts, and this may be handled by a system administrator of the network. . . . The number of volumes allocated to the host may be based on a requested number of volumes or alternatively, may be based on historical data requirements of the host. . . .

As can be seen here in Applicants' claim 7, clause (c), Blumenau provides no teaching, instruction or usage which involves program

means for calculating the optimum number of Servers per Farm and the optimum number of Redundant Servers per Farm.

Likewise, column 21 of Blumenau lines 45-60, and column 6, lines 1-20, can also be seen not to teach any such operation, as is indicated in Applicants' clause (c) of claim 7.

In regard to Applicants' claim 7(d), Examiner has cited Blumenau column 6, lines 1-41: -- This Blumenau aspect basically involves one or more hosts which may be coupled to one or more storage systems using a network, with requests and responses being forwarded to and from the "storage systems" over the network according to the protocol of the network.

Here, Blumenau does not indicate, show, or teach any aspect of Applicants' clause (d) involving loop sequencing means for configuring different numbers of Servers per Farm with different values of the redundancy factor in order to display parameters which meet or exceed a prescribed availability level goal.

Further, regarding Applicants' clause 7(d), Examiner cites Blumenau column 22, lines 1-30: -- where Blumenau states: -
- In a loop storage network topology, similar information may be obtained by querying each device in the loop and examining the Wns of each device in a similar manner. . . . Here, there is involved a storage network that includes a configuration database that facilitates shared access to "storage" resources, such as a configuration database 1232 (Fig. 12).

Other than mentioning a loop sequence means, it is seen that this does not relate to configuring different numbers of "Servers" per Farm with different values of the redundancy factor to display parameters which

meet or exceed a prescribed availability level goal. Thus, there is no teaching which would obviate claim 7(d).

To summarize the overall situation, just because the Blumenau patent indicates the use of processors coupled to a storage system over a network, it is in no way indicative or of teaching that it can teach and resolve the methods for optimizing a Server Farm. It should be noted that Applicants' system involves a thin client sizing tool having a method for developing a Metafarm having an optimal number of Server Farms to provide the proper configuration for multiple Server Farms and for certain specified parameters required for the system. No such teaching or capability will be found in the Blumenau reference.

In view of the above discussion, and in view of the factors shown which indicate that Blumenau cannot possibly teach Applicants' system and method for designing an optimized Server Farm or Metafarm to meet the needs of a specified customer, (as determined by the customer's profile), it can be readily seen that Applicants have contributed a valuable methodology to the technology of developing Server Farms to suit each particular individual customer involved.

As a result, it is now considered that Applicants' system should be viewed as a whole in its entirety, which does not fall under the generalized statements made by Blumenau in regard to identifying storage volumes -- in fact, quite a different series of problems are involved in Applicants' system which are not attacked by the Blumenau reference, and as a result, it is contended that Applicants' claims, when viewed as a whole in their entirety, do provide a substantive inventive

entity for which Applicants pray that Examiner will provide a timely Notice of Allowance therefor.

Respectfully submitted,



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